

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 04-273120

(43)Date of publication of application : 29.09.1992

(51)Int.Cl.

H01L 21/20

(21)Application number : 03-053503

(71)Applicant : NEC CORP

(22)Date of filing : 27.02.1991

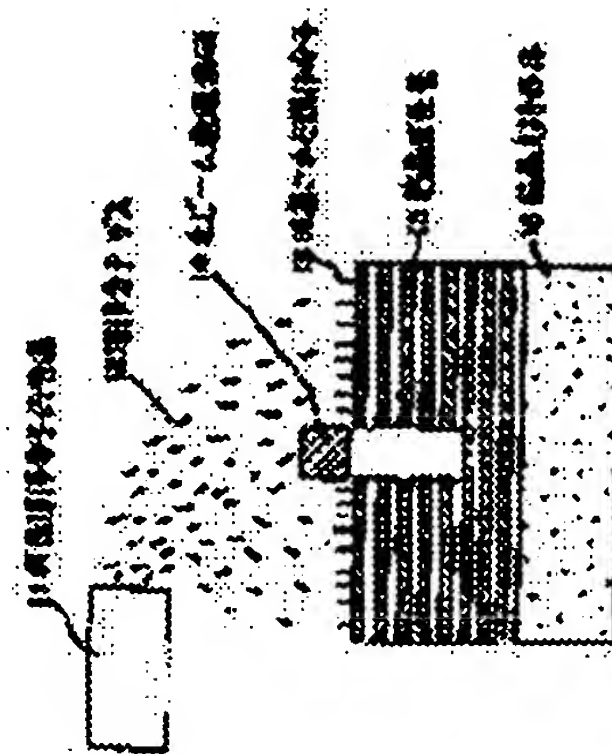
(72)Inventor : MOCHIZUKI YUSHI
TAKADA TOSHIKAZU
USUI AKIRA

(54) REGION-SELECTIVE CRYSTAL GROWTH METHOD

(57)Abstract:

PURPOSE: To form a fine structure directly inside a compound semiconductor crystal from a growth stage.

CONSTITUTION: When a compound semiconductor crystal is formed by an atomic layer epitaxial(ALE) method, a laser beam is irradiated parallel to a face immediately on a growth face and the electron state of medium molecules 12 inside the passage region 14 of the beam is changed. Thereby, the adsorption of the growth medium molecules 12 to the growth face is controlled, and a fine structure is formed. As different from a case where a posterior treatment such as an etching operation or the like is executed repeatedly to a uniformly grown crystal and a fine structure is formed, the fine structure can be obtained with good efficiency and with good accuracy.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the
examiner's decision of rejection or application
converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of
rejection]

[Date of requesting appeal against examiner's decision
of rejection]

[Date of extinction of right]